

News

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PRODUCTIVITY AND COSTS Third Quarter 2003

The Bureau of Labor Statistics of the U.S. Department of Labor today reported revised productivity data—as measured by output per hour of all persons—for the third quarter of 2003. The seasonally adjusted annual rates of productivity growth in the third quarter were:

8.6 percent in the business sector, and
9.4 percent in the nonfarm business sector.

In both sectors, upward revisions to productivity reflect much larger upward revisions to output than to hours.

In manufacturing, revised productivity increases in the third quarter were:

9.0 percent in manufacturing,
14.8 percent in durable goods manufacturing, and
3.1 percent in nondurable goods manufacturing.

Productivity in the manufacturing sector also rose more rapidly than was reported on Nov. 6. Output and hours both were revised up but the revisions to output were larger than those to hours in the sector. Output and hours in manufacturing, which includes about 15 percent of U.S. business sector employment, tend to vary more from quarter to quarter than data for the aggregate business and nonfarm business sectors. Third-quarter measures are summarized in table A and appear in detail in tables 1 through 5.

Revised historical measures through 2002 will be available on the BLS web site on Jan. 7, 2004, reflecting the release of revised source data. For more information see "Upcoming changes" on page 7.

Table A. Productivity and costs: Revised third-quarter 2003 measures (Seasonally adjusted annual rates)						
Sector	Productivity	Output	Hours	Hourly compensation	Real hourly compensation	Unit labor costs
Percent change from preceding quarter						
Business	8.6	10.2	1.4	2.3	0.0	-5.8
Nonfarm business	9.4	10.3	0.8	3.0	0.7	-5.8
Manufacturing	9.0	3.5	-5.0	4.1	1.7	-4.5
Durable	14.8	8.1	-5.9	3.5	1.1	-9.9
Nondurable	3.1	-0.8	-3.8	5.3	2.9	2.1
Percent change from same quarter a year ago						
Business	5.0	4.4	-0.6	2.8	0.6	-2.1
Nonfarm business	5.0	4.4	-0.5	2.7	0.5	-2.2
Manufacturing	4.4	-0.4	-4.7	4.4	2.2	0.0
Durable	6.9	1.4	-5.1	4.0	1.8	-2.7
Nondurable	1.8	-2.3	-4.0	5.2	2.9	3.4

The data sources and methods used in the preparation of the manufacturing series differ from those used in preparing the business and nonfarm business series, and these measures are not directly comparable. Output measures for business and nonfarm business are based on measures of gross domestic product prepared by the Bureau of Economic Analysis of the U.S. Department of Commerce. Quarterly output measures for manufacturing reflect indexes of industrial production independently prepared by the Board of Governors of the Federal Reserve System. See Technical Notes for further information on data sources (page 8).

Business

From the second quarter to the third quarter of 2003, business sector productivity rose at an annual rate of 8.6 percent, as output increased 10.2 percent and hours of all persons engaged in the sector rose 1.4 percent (table 1). This is only the second increase in hours since they began falling in the second quarter of 2000. The output increase was the largest since an 11.2-percent rise in the first quarter of 1984.

Hourly compensation rose 2.3 percent during the third quarter of 2003, less than the 4.1-percent increase in the second quarter. Hourly compensation includes wages and salaries, supplements, employer contributions to employee benefit plans, and taxes. Real hourly compensation, which takes into account changes in consumer prices, was unchanged in the third quarter of 2003.

Unit labor costs decreased 5.8 percent last quarter, a bigger drop than the 3.1-percent decline in the previous quarter. Unit labor costs last rose in the first quarter of the year, when they increased 0.5 percent. The implicit price deflator for the business sector, which reflects changes both in unit labor costs and in unit nonlabor payments, increased at a 1.7 percent annual rate in the third quarter of 2003.

Nonfarm business

Output per hour of all persons in the nonfarm business sector increased 9.4 percent during the third quarter of 2003 (table 2). Output rose 10.3 percent while hours of all persons increased 0.8 percent. The output increase was the largest since the third quarter of 1983, when it rose 11.5 percent. In the nonfarm business sector, hours last increased in the first quarter of 2000, when they rose 1.6 percent.

Hourly compensation grew 3.0 percent in the third quarter of 2003, down somewhat from the 3.6-percent increase in the previous quarter. When the rise in consumer prices is taken into account, real hourly compensation rose 0.7 percent in the third quarter of 2003.

Unit labor costs fell 5.8 percent in the third quarter, following a 3.2 percent decrease one quarter earlier. The implicit price deflator for nonfarm business rose 1.5 percent in the third quarter of 2003.

Manufacturing

Productivity increased 9.0 percent in manufacturing in the third quarter of 2003, as output increased 3.5 percent and hours of all persons dropped 5.0 percent (seasonally adjusted annual rates). Hours of all persons in manufacturing have fallen for thirteen consecutive quarters. In durable goods industries, productivity rose by 14.8 percent, reflecting an 8.1-percent rise in output and a decline of 5.9 percent in hours. Productivity grew much more slowly in the nondurable goods industries, 3.1 percent, as output fell 0.8 percent and hours fell more, 3.8 percent (tables 3, 4, and 5).

The hourly compensation of all manufacturing workers rose 4.1 percent during the third quarter of 2003. In durable goods manufacturing, hourly compensation increased 3.5 percent and in nondurable goods manufacturing it grew 5.3 percent. When the increase in consumer prices is taken into account, real hourly compensation for all manufacturing workers rose 1.7 percent in the third quarter.

Unit labor costs in manufacturing fell 4.5 percent in the third quarter after rising 2.2 percent in the previous quarter. Unit labor costs dropped 9.9 percent in durable goods manufacturing in the third quarter and they rose 2.1 percent in nondurable goods manufacturing.

Nonfinancial Corporations

Third-quarter 2003 measures of productivity and costs also were released for nonfinancial corporations (tables B and 6). Output per all-employee hour grew at a 9.2 percent annual rate, somewhat faster than the 8.4 percent increase in the previous quarter. Output increased 8.9 percent in the third quarter, and hours of all employees fell 0.2 percent (seasonally adjusted annual rates). The third quarter increase in output was the largest since a 9.5-percent rise in the first quarter of 2000 while the decrease in employee hours was the smallest since the third quarter of 2000, when they fell 0.1 percent. Employee hours have fallen in fourteen consecutive quarters. The nonfinancial corporate sector includes all corporations doing business in the United States, except those classified as depository institutions, nondepository institutions, security and commodity brokers, insurance carriers, regulated investment offices, small business investment offices, and real estate investment trusts.

Period	Productivity	Output	Hours	Hourly compensation	Real hourly compensation	Unit labor costs	Unit profits	Implicit price deflator
Percent change from preceding quarter								
2003 III	9.2	8.9	-0.2	3.0	0.7	-5.6	60.9	0.6
Percent change from same quarter a year ago								
2003 III	6.2	4.9	-1.2	3.3	1.1	-2.7	36.4	0.4

Hourly compensation in nonfinancial corporations increased 3.0 percent in the third quarter, down from the second quarter increase of 3.7 percent. When the rise in consumer prices is taken into account, real hourly compensation increased 0.7 percent in the third quarter.

Unit labor costs for the sector dropped 5.6 percent in third quarter 2003. Unit nonlabor costs also fell, 2.4 percent, while unit profits rose at a 60.9 percent annual rate in the third quarter. As a result of these movements, the implicit price deflator for the output of nonfinancial corporations—which reflects a weighted average of these three measures—increased 0.6 percent.

Revised Measures

Current and previous measures for the third quarter of 2003 for the business, nonfarm business, and manufacturing sectors are compared in table C. In the business and nonfarm business sectors, increases in productivity and output are larger than those reported on Nov. 6, based on the information available at that time. Unit labor cost measures for these sectors showed correspondingly larger declines. Similarly, in manufacturing rates of growth in output and productivity were revised up in the third quarter and unit labor costs show a larger decline than was reported last month.

Table C. Previous and revised productivity and related measures Quarterly percent change at seasonally adjusted annual rate						
Sector	Productivity	Output	Hours	Hourly compensation	Real hourly compensation	Unit labor costs
Third quarter 2003						
Business:						
Previous.....	7.4	8.8	1.3	2.4	0.1	-4.6
Current	8.6	10.2	1.4	2.3	0.0	-5.8
Nonfarm business:						
Previous.....	8.1	8.8	0.7	3.1	0.8	-4.6
Current	9.4	10.3	0.8	3.0	0.7	-5.8
Manufacturing:						
Previous.....	8.6	2.9	-5.2	4.3	1.9	-4.0
Current	9.0	3.5	-5.0	4.1	1.7	-4.5

In addition, quarterly measures of productivity, output, and unit labor costs for manufacturing were revised back to first quarter 2001 due to the incorporation of revised indexes of industrial production. The annual measures for 2001 and 2002 also were affected. In both years, output shows less of a decline than it had previously. Productivity was revised up by a corresponding amount in both years. The same revisions affected unit labor costs; they fall more in 2002 and increase less in 2001 than previously published. The output measures for more recent quarters, based on those published by the Board of Governors of the Federal Reserve System, were changed to incorporate additional and revised source data and updated information on seasonal trends. (See Federal Reserve statistical release G.17 (419), "Industrial Production and Capacity Utilization: the 2003 Annual Revision," Nov. 10, 2003.)

Table D. Manufacturing industries: Previous and revised productivity and related measures Annual percent changes						
Sector	Productivity	Output	Hours	Hourly compensation	Real hourly compensation	Unit labor costs
Annual average 2002						
Previous.....	6.1	-1.1	-6.8	4.7	3.1	-1.3
Current	6.5	-0.7	-6.8	4.7	3.1	-1.7
Annual average 2001						
Previous.....	1.6	-4.9	-6.4	2.4	-0.4	0.8
Current	1.8	-4.7	-6.4	2.4	-0.4	0.6

Although the Federal Reserve revised and reclassified its indexes of industrial production (IIP) back to 1972 when they released their historical revisions in December 2002, the Bureau of Labor Statistics has not yet incorporated these changes into its historical quarterly measures for years before 2001. When revised historical productivity data are released on Jan. 7, 2004, the updated information from the IIP will be incorporated into the quarterly measures.

Next release date

The next release of **Productivity and Costs** is scheduled for **8:30 AM EST, Thursday, February 5, 2004**. Preliminary fourth-quarter and annual 2003 measures will be released at that time.

Scheduled release dates for productivity and costs measures for major sectors of the U.S. economy in 2004 are:

<u>Reference period</u>	<u>2004 release date</u>
2003:	
Fourth quarter, Annual	February 5
Fourth quarter, Annual (revised)	March 4
2004:	
First quarter	May 6
First quarter (revised)	June 3
Second quarter	August 10
Second quarter (revised)	September 2
Third quarter	November 4
Third quarter (revised)	December 7

These dates are based on presently available schedules for the release of underlying source data in 2004. Each issue of *Productivity and Costs* contains a "Next release date" paragraph that readers should use to confirm the dates above.

Upcoming changes

In order to provide users with information on long-term productivity and cost trends reflecting the release of the revised national income and product accounts by the Bureau of Economic Analysis, U.S. Department of Commerce, on Dec. 10, 2003, revised historical measures of productivity and costs for all sectors will be prepared by the BLS. Revised data for the manufacturing and nonfinancial corporate sectors also will reflect conversion from the 1987 Standard Industrial Classification to the 2002 North American Industry Classification System. On Jan. 7, 2004, the BLS will post revised historical measures through the fourth quarter of 2002 on its web site <http://www.bls.gov/lpc/>, but will not incorporate these data into the LABSTAT database at that time. In keeping with usual practices, revised data for the second and third quarters of 2003 will be reported in the "Productivity and Costs" release of Feb. 5, 2004, which also will include revised first-quarter 2003 data. All revised historical data will be incorporated into the LABSTAT database at the time of that release.

TECHNICAL NOTES

Labor Hours: Hours data for the labor productivity and cost measures include hours for all persons working in the sector—wage and salary workers, the self-employed, and unpaid family workers. The primary source of hours and employment data is the BLS Current Employment Statistics (CES) program, which provides monthly survey data on the number of jobs held by wage and salary workers in nonfarm establishments. The CES also provides average weekly paid hours of production and nonsupervisory workers in these establishments. The Office of Productivity and Technology estimates average weekly paid hours of nonproduction and supervisory workers. Weekly paid hours were adjusted to hours at work using the BLS Hours at Work survey, conducted for this purpose. Data from the National Compensation Survey are used for recent years.

Data from the BLS Current Population Survey (CPS) are used for farm labor, nonfarm proprietors, and nonfarm unpaid family workers. Estimates of labor input for government enterprises are derived from the CPS, the CES, and the National Income and Product Accounts (NIPA) prepared by the Bureau of Economic Analysis (BEA) of the Department of Commerce.

Output: Business sector output is an annual-weighted index constructed after excluding from gross domestic product (GDP) the following outputs: General government, nonprofit institutions, paid employees of private households, and the rental value of owner-occupied dwellings. Corresponding exclusions also are made in labor inputs. Business output accounted for about 77 percent of the value of GDP in 1996. Nonfarm business, which also excludes farming, accounted for about 76 percent of GDP in 1996.

Annual indexes for manufacturing and its durable and nondurable goods components are constructed by deflating current-dollar industry value of production data from the U.S. Bureau of the Census with deflators from the BEA. These deflators are based on data from the BLS producer price program and other sources. The industry shipments are aggregated using annual weights, and intrasector transactions are removed. Quarterly manufacturing output measures are based on the index of industrial production prepared monthly by the Board of Governors of the Federal Reserve System adjusted to be

consistent with annual indexes of manufacturing sector output prepared by BLS. Durables include the following 2-digit SIC industries: Primary metal industries; fabricated metal products; nonelectrical machinery; industrial and commercial machinery and computer equipment; electronic and other electrical equipment; transportation equipment; instruments; lumber and lumber products; furniture and fixtures; stone, clay, and glass and concrete products; and miscellaneous manufactures. Nondurables include: Food and kindred products, tobacco products, textile mill products, apparel products, paper and allied products, printing and publishing, chemicals and chemical products, petroleum refining and related industries, rubber and plastic products, and leather and leather products.

Nonfinancial corporate output is an annual-weighted index calculated on the basis of the costs incurred and the incomes earned from production. The output measure excludes the following outputs from GDP: general government; nonprofit institutions; employees of private households; the rental value of owner-occupied dwellings; unincorporated business; and those corporations which are depository institutions, nondepository institutions, security and commodity brokers, insurance carriers, regulated investment offices, small business investment offices, and real estate investment trusts. Nonfinancial corporations accounted for about 53 percent of the value of GDP in 1996.

Productivity: These productivity measures describe the relationship between real output and the labor time involved in its production. They show the changes from period to period in the amount of goods and services produced per hour. Although these measures relate output to hours at work of all persons engaged in a sector, they do not measure the specific contribution of labor, capital, or any other factor of production. Rather, they reflect the joint effects of many influences, including changes in technology; capital investment; level of output; utilization of capacity, energy, and materials; the organization of production; managerial skill; and the characteristics and effort of the work force. Information in this release will be made available to sensory-impaired individuals upon request. Voice phone: 202-691-5200; Federal Relay Service number: 1-800-877-8339.

Table 1. Business sector: Productivity, hourly compensation, unit labor costs, and prices, seasonally adjusted

Year and quarter	Output per hour of all persons	Output	Hours of all persons	Compensation per hour (1)	Real compensation per hour (2)	Unit labor costs	Unit non-labor payments (3)	Implicit price deflator (4)	

Indexes 1992=100									
2001	I	117.4	140.4	119.6	137.4	111.9	117.1	112.0	115.2
	II	117.8	139.4	118.3	138.2	111.6	117.3	113.3	115.8
	III	118.8	139.1	117.1	139.1	112.1	117.1	115.1	116.4
	IV	121.3	140.3	115.6	139.8	112.8	115.2	117.0	115.9
	ANNUAL	118.8	139.8	117.6	138.6	112.1	116.7	114.3	115.8
2002	I	123.9	142.3	114.9	141.0	113.4	113.8	119.7	116.0
	II	124.1	142.5	114.8	142.4	113.5	114.7	118.8	116.2
	III	125.9	144.4	114.6	143.1	113.5	113.6	120.9	116.3
	IV	126.4	145.0	114.7	143.7	113.4	113.7	122.1	116.8
	ANNUAL	125.1	143.5	114.7	142.5	113.5	113.9	120.4	116.3
2003	I	127.2	145.5	114.3	144.8	113.3	113.8	123.0	117.2
	II	129.5	147.1	113.6	146.3	114.2	112.9	125.3	117.5
	III	r132.2	r150.7	r114.0	r147.1	114.2	r111.3	r129.6	118.0

Percent change from previous quarter at annual rate(5)									
2001	I	-0.5	-1.0	-0.5	4.6	0.8	5.1	0.3	3.4
	II	1.5	-2.8	-4.3	2.3	-0.9	0.8	4.6	2.2
	III	3.3	-0.9	-4.1	2.5	1.6	-0.8	6.8	1.8
	IV	8.7	3.5	-4.8	2.1	2.7	-6.1	6.7	-1.6
	ANNUAL	2.0	-0.2	-2.1	3.8	1.0	1.8	2.3	2.0
2002	I	8.7	5.9	-2.6	3.5	2.2	-4.8	9.6	0.3
	II	0.8	0.6	-0.2	4.0	0.4	3.1	-3.2	0.7
	III	5.9	5.3	-0.6	2.1	0.0	-3.6	7.6	0.5
	IV	1.5	1.7	0.2	1.6	-0.4	0.1	3.8	1.5
	ANNUAL	5.3	2.7	-2.5	2.8	1.2	-2.3	5.3	0.4
2003	I	2.7	1.4	-1.2	3.2	-0.6	0.5	3.2	1.6
	II	7.4	4.5	-2.7	4.1	3.5	-3.1	7.7	1.0
	III	r8.6	r10.2	r1.4	r2.3	r0.0	r-5.8	r14.2	r1.7

Percent change from corresponding quarter of previous year									
2001	I	2.2	1.4	-0.8	4.9	1.4	2.6	1.4	2.2
	II	1.1	-0.7	-1.7	4.8	1.4	3.7	-0.5	2.1
	III	1.7	-1.0	-2.6	3.3	0.6	1.6	3.7	2.3
	IV	3.2	-0.3	-3.4	2.9	1.0	-0.3	4.6	1.4
	ANNUAL	2.0	-0.2	-2.1	3.8	1.0	1.8	2.3	2.0
2002	I	5.5	1.4	-3.9	2.6	1.4	-2.8	6.9	0.7
	II	5.4	2.3	-2.9	3.0	1.7	-2.2	4.9	0.3
	III	6.0	3.8	-2.1	2.9	1.3	-2.9	5.0	0.0
	IV	4.2	3.4	-0.8	2.8	0.5	-1.4	4.3	0.7
	ANNUAL	5.3	2.7	-2.5	2.8	1.2	-2.3	5.3	0.4
2003	I	2.7	2.2	-0.5	2.7	-0.1	0.0	2.8	1.1
	II	4.3	3.2	-1.1	2.8	0.6	-1.5	5.5	1.1
	III	r5.0	r4.4	-0.6	2.8	0.6	r-2.1	r7.1	1.4

See footnotes following Table 6.
r=revisedDecember 3, 2003
Source: Bureau of Labor Statistics

Table 2. Nonfarm business sector: Productivity, hourly compensation, unit labor costs, and prices, seasonally adjusted

Year and quarter	Output per hour of all persons	Output	Hours of all persons	Compensation per hour (1)	Real compensation per hour (2)	Unit labor costs	Unit non-labor payments (3)	Implicit price deflator (4)	

Indexes 1992=100									
2001	I	116.9	140.7	120.3	136.7	111.3	117.0	113.5	115.7
	II	117.4	139.7	119.0	137.4	111.0	117.1	114.9	116.3
	III	118.3	139.4	117.8	138.2	111.4	116.8	116.8	116.8
	IV	120.7	140.4	116.3	138.9	112.1	115.1	119.0	116.5
	ANNUAL	118.3	140.1	118.4	137.8	111.4	116.5	116.1	116.3
2002	I	123.4	142.5	115.5	140.2	112.8	113.6	121.5	116.4
	II	123.7	142.9	115.5	141.5	112.9	114.4	121.2	116.8
	III	125.5	144.7	115.3	142.2	112.8	113.3	123.1	116.9
	IV	126.0	145.3	115.3	142.8	112.7	113.3	124.3	117.3
	ANNUAL	124.7	143.9	115.4	141.7	112.8	113.6	122.5	116.9
2003	I	126.7	145.8	115.1	143.7	112.4	113.4	125.2	117.7
	II	128.9	147.5	114.4	145.0	113.2	112.5	127.5	117.9
	III	r131.8	r151.1	r114.7	146.1	113.4	r110.8	r131.6	r118.3

Percent change from previous quarter at annual rate(5)									
2001	I	-0.4	-0.9	-0.5	4.3	0.5	4.7	0.8	3.3
	II	1.6	-2.7	-4.3	2.0	-1.2	0.3	5.0	2.0
	III	3.4	-0.8	-4.1	2.4	1.5	-0.9	6.6	1.7
	IV	8.3	2.9	-5.0	2.1	2.7	-5.7	7.7	-1.0
	ANNUAL	1.9	-0.1	-2.0	3.6	0.8	1.7	2.4	1.9
2002	I	9.3	6.2	-2.9	3.7	2.4	-5.2	8.7	-0.2
	II	1.0	0.9	0.0	3.9	0.3	2.9	-0.9	1.4
	III	5.9	5.2	-0.6	2.0	-0.2	-3.7	6.6	0.1
	IV	1.7	1.7	0.0	1.6	-0.4	-0.1	3.9	1.4
	ANNUAL	5.4	2.7	-2.5	2.8	1.2	-2.4	5.6	0.5
2003	I	2.1	1.4	-0.7	2.6	-1.2	0.4	2.8	1.4
	II	7.0	4.6	-2.2	3.6	3.0	-3.2	7.4	0.8
	III	r9.4	r10.3	r0.8	r3.0	r0.7	r-5.8	r13.5	1.5

Percent change from corresponding quarter of previous year									
2001	I	2.0	1.4	-0.6	4.5	1.1	2.5	1.4	2.1
	II	1.1	-0.6	-1.6	4.6	1.1	3.5	-0.3	2.1
	III	1.7	-0.8	-2.5	3.0	0.3	1.3	3.7	2.2
	IV	3.2	-0.4	-3.5	2.7	0.9	-0.5	5.0	1.5
	ANNUAL	1.9	-0.1	-2.0	3.6	0.8	1.7	2.4	1.9
2002	I	5.6	1.3	-4.0	2.5	1.3	-2.9	7.0	0.6
	II	5.4	2.3	-3.0	3.0	1.7	-2.3	5.4	0.5
	III	6.1	3.8	-2.1	2.9	1.3	-3.0	5.4	0.1
	IV	4.4	3.5	-0.9	2.8	0.5	-1.6	4.5	0.7
	ANNUAL	5.4	2.7	-2.5	2.8	1.2	-2.4	5.6	0.5
2003	I	2.6	2.3	-0.3	2.5	-0.4	-0.1	3.1	1.1
	II	4.1	3.2	-0.9	2.4	0.3	-1.6	5.2	0.9
	III	r5.0	r4.4	r-0.5	2.7	0.5	r-2.2	r6.8	1.3

See footnotes following Table 6.
r=revised

December 3, 2003
Source: Bureau of Labor Statistics

Table 3. Manufacturing sector: Productivity, hourly compensation, and unit labor costs, seasonally adjusted

Year and quarter	Output per hour of all persons	Output	Hours of all persons	Compensation per hour (1)	Real compensation per hour (2)	Unit labor costs	

Indexes 1992=100							
2001	I	r135.1	r134.8	99.8	132.0	107.5	r97.7
	II	r136.1	r133.1	97.8	133.6	107.9	r98.2
	III	r137.9	r131.2	95.1	135.0	108.8	97.9
	IV	r140.6	r129.7	92.3	136.7	110.3	r97.2
	ANNUAL	r137.3	r132.2	96.3	134.3	108.6	r97.8
2002	I	r144.0	r130.4	90.6	138.3	111.3	r96.1
	II	r145.9	r131.5	90.2	140.5	112.0	r96.3
	III	r147.7	r132.0	89.4	141.3	112.1	r95.7
	IV	r147.9	r131.1	88.6	142.4	112.4	r96.3
	ANNUAL	r146.3	r131.3	89.7	140.6	112.0	r96.1
2003	I	r150.0	r131.4	87.6	144.3	112.9	r96.2
	II	r151.0	r130.3	86.3	146.1	114.1	r96.8
	III	r154.3	r131.5	85.2	147.6	114.6	r95.7

Percent change from previous quarter at annual rate(5)							
2001	I	r-2.4	r-8.0	-5.7	1.6	-2.1	r4.1
	II	r3.2	r-4.9	-7.9	5.0	1.7	r1.7
	III	r5.2	r-5.7	-10.3	4.1	3.2	r-1.0
	IV	r8.0	r-4.3	-11.5	5.1	5.7	r-2.8
	ANNUAL	r1.8	r-4.7	-6.4	2.4	-0.4	r0.6
2002	I	r10.0	r2.1	-7.2	5.0	3.7	r-4.6
	II	r5.4	r3.4	-1.9	6.3	2.7	r0.9
	III	r5.3	r1.7	-3.4	2.5	0.3	r-2.6
	IV	r0.4	r-2.9	-3.3	3.1	1.1	r2.7
	ANNUAL	r6.5	r-0.7	-6.8	4.7	3.1	r-1.7
2003	I	r5.8	r1.0	-4.5	5.4	1.5	r-0.3
	II	r2.8	r-3.2	-5.8	5.0	4.4	r2.2
	III	r9.0	r3.5	r-5.0	r4.1	r1.7	r-4.5

Percent change from corresponding quarter of previous year							
2001	I	r1.1	r-2.5	-3.6	0.5	-2.9	r-0.6
	II	r1.0	r-4.8	-5.7	3.4	0.0	r2.4
	III	1.8	r-5.8	-7.5	2.1	-0.6	r0.2
	IV	r3.4	r-5.7	-8.9	3.9	2.1	r0.5
	ANNUAL	r1.8	r-4.7	-6.4	2.4	-0.4	r0.6
2002	I	r6.6	r-3.3	-9.2	4.8	3.6	r-1.7
	II	r7.1	r-1.2	-7.8	5.1	3.8	r-1.9
	III	r7.2	r0.7	-6.1	4.7	3.1	r-2.3
	IV	r5.2	1.0	-4.0	4.2	1.9	-0.9
	ANNUAL	r6.5	r-0.7	-6.8	4.7	3.1	r-1.7
2003	I	r4.2	r0.8	-3.3	4.3	1.4	r0.2
	II	r3.5	r-0.9	-4.2	4.0	1.8	r0.5
	III	r4.4	r-0.4	-4.7	r4.4	2.2	r0.0

See footnotes following Table 6.
r=revised

December 3, 2003
Source: Bureau of Labor Statistics

Table 4. Durable manufacturing sector: Productivity, hourly compensation, and unit labor costs, seasonally adjusted

Year and quarter	Output per hour of all persons	Output	Hours of all persons	Compensation per hour (1)	Real compensation per hour (2)	Unit labor costs	

Indexes 1992=100							
2001	I	r149.4	158.3	106.0	129.4	105.3	86.6
	II	r150.4	r155.7	103.5	131.3	106.1	r87.3
	III	r152.4	r152.5	100.1	132.0	106.4	r86.6
	IV	r155.3	r150.1	96.7	134.3	108.4	r86.5
	ANNUAL	r151.8	r154.1	101.5	131.7	106.5	r86.8
2002	I	r160.0	r151.2	94.5	135.6	109.1	r84.8
	II	r162.8	r153.2	94.1	138.2	110.3	r84.9
	III	r165.9	r154.5	93.1	138.8	110.1	r83.6
	IV	r168.0	r154.6	92.0	140.0	110.5	r83.3
	ANNUAL	r164.2	r153.4	93.4	138.1	110.0	r84.1
2003	I	r170.2	r155.2	91.2	141.5	110.6	r83.1
	II	r171.4	r153.6	89.7	143.1	111.7	r83.5
	III	r177.4	r156.7	88.3	r144.3	r112.0	r81.4

Percent change from previous quarter at annual rate(5)							
2001	I	r-1.8	r-8.7	-7.0	3.1	-0.6	r5.0
	II	r2.9	r-6.5	-9.1	6.2	2.9	r3.3
	III	r5.3	r-8.0	-12.6	2.0	1.1	r-3.1
	IV	r7.9	r-5.9	-12.8	7.2	7.8	r-0.7
	ANNUAL	r1.4	r-5.8	-7.1	1.8	-0.9	r0.4
2002	I	r12.6	r2.8	-8.7	3.9	2.6	r-7.7
	II	r7.4	r5.5	-1.7	8.1	4.4	r0.7
	III	r7.8	r3.3	-4.2	1.6	-0.5	r-5.8
	IV	r5.1	r0.4	-4.4	3.5	1.5	r-1.5
	ANNUAL	r8.1	r-0.5	-8.0	4.9	3.3	r-3.0
2003	I	r5.4	r1.4	-3.8	4.4	0.5	r-0.9
	II	r2.7	r-3.9	-6.4	4.6	4.0	r1.8
	III	r14.8	r8.1	r-5.9	r3.5	r1.1	r-9.9

Percent change from corresponding quarter of previous year							
2001	I	r0.6	r-2.8	-3.3	-1.1	-4.3	-1.6
	II	r0.3	r-5.8	-6.1	3.0	-0.4	r2.7
	III	r1.4	r-7.4	-8.6	1.1	-1.6	r-0.3
	IV	r3.5	r-7.3	-10.4	4.6	2.7	r1.1
	ANNUAL	r1.4	r-5.8	-7.1	1.8	-0.9	r0.4
2002	I	r7.1	r-4.5	-10.8	4.8	3.6	r-2.1
	II	r8.2	r-1.6	-9.1	5.3	3.9	r-2.8
	III	r8.9	r1.3	-7.0	5.2	3.5	r-3.4
	IV	r8.2	r3.0	-4.8	4.2	2.0	r-3.6
	ANNUAL	r8.1	r-0.5	-8.0	4.9	3.3	r-3.0
2003	I	r6.4	r2.6	-3.5	4.4	1.4	r-1.9
	II	r5.2	r0.3	-4.7	3.5	1.3	r-1.6
	III	r6.9	r1.4	r-5.1	r4.0	1.8	r-2.7

See footnotes following Table 6.
r=revised

December 3, 2003
Source: Bureau of Labor Statistics

Table 5. Nondurable manufacturing sector: Productivity, hourly compensation, and unit labor costs, seasonally adjusted

Year and quarter	Output per hour of all persons	Output	Hours of all persons	Compensation per hour (1)	Real compensation per hour (2)	Unit labor costs

Indexes 1992=100						
2001	I	r122.8	r112.4	91.6	134.7	109.7
	II	123.8	r111.6	90.2	135.8	109.7
	III	r124.9	r110.7	88.6	138.6	r110.9
	IV	r127.2	r110.0	86.4	139.2	r109.5
	ANNUAL	r124.6	r111.2	89.2	137.0	110.8
2002	I	r129.2	r110.3	85.4	141.6	113.9
	II	r130.3	r110.6	84.9	142.9	113.9
	III	r131.0	r110.7	84.4	144.3	114.5
	IV	r129.4	r108.8	84.1	145.3	114.7
	ANNUAL	r130.0	r110.1	84.7	143.5	114.3
2003	I	r131.5	r109.0	82.9	147.8	115.5
	II	r132.3	r108.4	81.9	149.9	117.0
	III	r133.3	r108.1	81.1	151.8	117.9

Percent change from previous quarter at annual rate(5)						
2001	I	r-3.6	r-7.0	-3.6	-0.8	-4.4
	II	r3.2	r-2.9	-5.9	3.3	0.0
	III	r3.8	r-3.2	-6.7	8.4	7.4
	IV	r7.5	r-2.6	-9.4	1.9	2.5
	ANNUAL	r2.0	r-3.4	-5.3	3.6	0.8
2002	I	r6.5	r1.3	-4.9	7.1	5.8
	II	r3.4	r1.2	-2.1	3.5	0.0
	III	r2.3	r0.0	-2.2	4.2	2.0
	IV	r-4.9	r-6.4	-1.6	2.6	0.6
	ANNUAL	r4.3	r-1.0	-5.0	4.7	3.1
2003	I	r6.5	r0.7	-5.5	7.0	3.1
	II	r2.6	r-2.4	-4.9	5.9	5.3
	III	r3.1	r-0.8	r-3.8	5.3	2.9

Percent change from corresponding quarter of previous year						
2001	I	r1.8	r-2.2	-3.9	3.1	-0.3
	II	1.7	r-3.5	-5.1	4.1	0.7
	III	r1.9	r-4.0	-5.9	4.1	1.3
	IV	r2.6	r-4.0	-6.4	3.1	1.3
	ANNUAL	r2.0	r-3.4	-5.3	3.6	0.8
2002	I	r5.2	r-1.9	-6.7	5.1	3.9
	II	5.3	r-0.9	-5.8	5.2	3.9
	III	r4.9	r0.0	-4.7	4.2	2.5
	IV	r1.7	r-1.0	-2.7	4.3	2.1
	ANNUAL	r4.3	r-1.0	-5.0	4.7	3.1
2003	I	r1.7	r-1.2	-2.9	4.3	1.4
	II	r1.5	r-2.1	-3.6	4.9	2.7
	III	1.8	-2.3	-4.0	5.2	r2.9

See footnotes following Table 6.
r=revised

December 3, 2003
Source: Bureau of Labor Statistics

Table 6. Nonfinancial corporations: Productivity, hourly compensation, unit labor costs, unit profits, and prices, seasonally adjusted

Year and quarter	Output per all-employee hour	Output	Employee hours	Hourly compensation (1)	Real hourly compensation (2)	Unit labor costs	Unit non-labor costs (6)	Total unit costs (7)	Unit profits (8)	Implicit price deflator (4)	

Indexes 1992=100											
2001	I	118.7	147.9	124.7	131.2	106.8	110.6	111.6	110.8	93.1	109.3
	II	120.0	147.8	123.1	132.6	107.1	110.4	113.5	111.3	95.4	109.9
	III	121.3	147.7	121.7	133.8	107.8	110.3	115.5	111.7	97.9	110.5
	IV	124.5	149.6	120.2	134.7	108.7	108.2	114.1	109.8	107.6	109.6
	ANNUAL	121.1	148.2	122.4	133.0	107.6	109.9	113.7	110.9	98.5	109.8
2002	I	126.0	150.8	119.7	135.9	109.4	107.9	114.0	109.5	107.6	109.4
	II	127.7	152.8	119.6	137.3	109.5	107.5	114.5	109.4	107.8	109.3
	III	128.7	153.4	119.2	138.2	109.7	107.4	115.4	109.6	104.6	109.1
	IV	129.9	154.5	118.9	139.2	109.9	107.1	115.2	109.3	110.1	109.4
	ANNUAL	128.1	152.9	119.3	137.7	109.6	107.5	114.8	109.4	107.5	109.3
2003	I	131.0	155.2	118.4	140.5	109.9	107.2	114.9	109.3	112.4	109.6
	II	133.7	157.6	117.9	141.8	110.7	106.1	112.6	107.8	126.8	109.4
	III	136.7	161.0	117.8	142.8	110.9	104.5	111.9	106.5	142.8	109.6

Percent change from previous quarter at annual rate (5)											
2001	I	-2.6	-3.3	-0.7	-1.2	-4.7	1.4	10.1	3.7	-20.2	1.7
	II	4.7	-0.5	-5.0	4.3	1.0	-0.4	7.1	1.6	10.0	2.2
	III	4.4	-0.3	-4.5	3.7	2.8	-0.6	7.2	1.5	10.8	2.2
	IV	10.8	5.4	-4.9	2.7	3.3	-7.3	-4.9	-6.7	46.1	-3.3
	ANNUAL	2.0	-0.1	-2.1	3.1	0.3	1.0	6.5	2.5	-11.7	1.2
2002	I	5.0	3.3	-1.6	3.7	2.5	-1.2	-0.2	-0.9	-0.2	-0.8
	II	5.5	5.3	-0.3	4.2	0.6	-1.3	1.7	-0.5	0.9	-0.3
	III	3.1	1.7	-1.4	2.7	0.5	-0.5	3.1	0.5	-11.2	-0.5
	IV	3.8	2.8	-1.0	2.8	0.8	-1.0	-0.6	-0.9	22.8	0.9
	ANNUAL	5.8	3.1	-2.5	3.5	1.9	-2.2	1.0	-1.3	9.1	-0.5
2003	I	3.4	1.9	-1.5	3.8	0.0	0.4	-1.0	0.0	8.5	0.7
	II	8.4	6.3	-1.9	3.7	3.1	-4.3	-7.9	-5.3	61.6	-0.5
	III	9.2	8.9	-0.2	3.0	0.7	-5.6	-2.4	-4.7	60.9	0.6

Percent change from corresponding quarter of previous year											
2001	I	0.9	0.4	-0.4	3.5	0.1	2.6	6.7	3.7	-22.0	1.3
	II	1.5	-0.1	-1.6	3.9	0.5	2.3	6.8	3.5	-19.7	1.3
	III	1.6	-1.1	-2.7	2.7	0.0	1.1	7.8	2.9	-10.6	1.7
	IV	4.2	0.3	-3.8	2.4	0.5	-1.8	4.7	0.0	9.2	0.7
	ANNUAL	2.0	-0.1	-2.1	3.1	0.3	1.0	6.5	2.5	-11.7	1.2
2002	I	6.2	1.9	-4.0	3.6	2.4	-2.4	2.2	-1.2	15.5	0.0
	II	6.4	3.4	-2.8	3.6	2.3	-2.6	0.9	-1.7	13.0	-0.6
	III	6.1	3.9	-2.1	3.3	1.7	-2.6	-0.1	-1.9	6.9	-1.3
	IV	4.4	3.2	-1.1	3.3	1.1	-1.0	1.0	-0.4	2.4	-0.2
	ANNUAL	5.8	3.1	-2.5	3.5	1.9	-2.2	1.0	-1.3	9.1	-0.5
2003	I	4.0	2.9	-1.1	3.4	0.5	-0.6	0.8	-0.2	4.5	0.2
	II	4.7	3.1	-1.5	3.2	1.1	-1.4	-1.7	-1.5	17.6	0.1
	III	6.2	4.9	-1.2	3.3	1.1	-2.7	-3.0	-2.8	36.4	0.4

See footnotes following Table 6.
r=revisedDecember 3, 2003
Source: Bureau of Labor Statistics

SOURCES: Output data are from the Bureau of Economic Analysis and the Census Bureau of the U.S. Department of Commerce; the Bureau of Labor Statistics, U.S. Department of Labor; and the Federal Reserve Board. Compensation and hours data are from the Bureau of Labor Statistics and the Bureau of Economic Analysis.

RELIABILITY: Productivity and cost measures are regularly revised as more complete information becomes available. The measures are first published within 40 days of the close of the reference period; revisions appear 30 days later, and second revisions after an additional 60 days. In the business sector, the third publication (second revision) of a quarterly index of output per hour of all persons has differed from the initial value by between -1.4 and $+1.5$ index points approximately 95 percent of the time. This interval is based on the performance of this measure between the fourth quarter of 1995 and the second quarter of 2003.

Footnotes, Tables 1-6

- (1) Wages and salaries of employees plus employers' contributions for social insurance and private benefit plans. Except for nonfinancial corporations, where there are no self-employed, data also include an estimate of wages, salaries, and supplemental payments for the self-employed.
- (2) The change for recent quarters is based on the Consumer Price Index for all urban consumers (CPI-U). The trend from 1978-2002 is based on the Consumer Price Index research series (CPI-U-RS).
- (3) Unit nonlabor payments include profits, capital consumption allowances, interest, rental income of persons, and indirect taxes.
- (4) Current dollar output divided by the output index.
- (5) Quarterly changes: Percent change compounded at annual rate from the original data rather than index numbers. Annual changes: Percent change between annual average levels.
- (6) Unit nonlabor costs include capital consumption allowances, interest, rental income of persons, and indirect taxes. For nonfinancial corporations, rental income of persons is zero by definition.
- (7) Total unit costs are the sum of unit labor and nonlabor costs.
- (8) Unit profits include corporate profits with inventory valuation and capital consumption adjustments.